

## CLAIMS

1. A method of scheduling, comprising:  
transmitting a rate request if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;  
receiving the rate request;  
transmitting a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration;  
receiving the rate assignment; and  
transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.
2. The method of claim 1, wherein the scheduled duration is an integer multiple of a minimum scheduled duration.
3. The method of claim 1, wherein the scheduled duration is less than or equal to a scheduling period, the scheduling period is an interval of time after which a scheduler makes a scheduling decision.
4. The method of claim 3, wherein the scheduling period is variable.
5. The method of claim 3, wherein the scheduled duration is variable.
6. The method of claim 4, wherein the scheduled duration is variable.
7. The method of claim 5, wherein the scheduled duration is based on priority of a station.
8. The method of claim 5, wherein the scheduled duration is based on a maximum supportable rate.
9. The method of claim 8, wherein the scheduled duration is the longest possible duration for the maximum supportable rate.

10. The method of claim 5, wherein the scheduled duration is based on an estimate of amount of data in the buffer.
11. The method of claim 7, wherein the priority of the station is based on channel conditions.
12. The method of claim 7, wherein the priority of the station is based on an estimate of the amount of data in the buffer.
13. The method of claim 7, wherein the priority of the station is based on the rate requested.
14. The method of claim 7, wherein the priority of the station is based on throughput allocated.
15. The method of claim 7, wherein the station is a mobile station.
16. A method of scheduling, comprising:
  - receiving a rate request;
  - transmitting a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and
  - receiving data for the scheduled duration at the scheduled rate.
17. A method of transmitting data, comprising:
  - transmitting a rate request if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;
  - receiving a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and
  - transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

18. A station for scheduling data transmissions, comprising:  
means for receiving a rate request;  
means for transmitting a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and  
means for receiving data for the scheduled duration at the scheduled rate.
19. A station for transmitting data, comprising:  
means for transmitting a rate request if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;  
means for receiving a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and  
means for transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.
20. A station for scheduling data transmissions, comprising:  
means for transmitting a rate request if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;  
means for transmitting a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and  
means for transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.
21. A computer-readable medium embodying a program of instructions executable by a processor to perform a method of transmitting data, comprising:  
transmitting a rate request if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;  
receiving a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and  
transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

22. A computer-readable medium embodying a program of instructions executable by a processor to perform a method of scheduling data transmissions, comprising:

receiving a rate request;

transmitting a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

receiving data for the scheduled duration at the scheduled rate.